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ABSTRACT

Over 80 wilderness/adventure programs have emerged as a valuable alternative to traditional treatment for juvenile offenders, especially in combination with other services. Participants are referred from many points in the juvenile justice system by agents who should have a thorough understanding of wilderness programs so as to prepare the juvenile adequately. Lasting 14-30 days, the programs are varied but usually closely resemble the structure of the standard Outward Bound course, presenting a series of progressively difficult physical challenges and problems in order to develop skills upon which the youth can rely in the future. In general, the use of action, the outdoors, the formation of a cooperative community, programmed success, the use of stress, and the counselor's special role suit adventure programs to the special problems of juvenile offenders and help aid the development of problem-solving skills and enhance self-concept and self-control. Individual evaluation reports and comprehensive community-based follow-up often complete wilderness programs for juvenile offenders. Despite considerable research, definitive findings are scarce, but apparently the relatively economical programs result in significant positive personality changes and reduced recidivism, at least in the short run. Standards and regulation, risk management, staff election, and environmental impact are current concerns for program practitioners. (SB)

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NATIONAL CENTER FOR THE ASSESSMENT OF

ALTERNATIVES TO JUVENILE JUSTICE PROCESSING

WILDERNESS/ADVENTURE PROGRAMS FOR JUVENILE OFFENDERS

by

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INTRODUCTION

The recent disillusionment with traditional justice system processing and institutional incarceration of delinquent youth has resulted in the development of a variety of alternatives. Wilderness-adventure programs, sometimes referred to as stress/challenge programs, are among these alternatives. Over eighty such programs which accept delinquent youth are listed in a recent directory prepared by the Association for Experiential Education (Journal of Experiential Education, Fall, 1979). Their usual format includes a group wilderness experience, lasting from seven to thirty days, often followed by various patterns of assistance to reintegrate delinquent youth into the community. The follow-up may include individual, family, and group counseling, and may extend over periods of six to twelve months.

The wilderness-adventure phase of this program is generally adapted from the seven Outward Bound Schools in the United States. Outward Bound proponents believe personal growth results when an individual faces provocative problems inherent in such activities as mountaineering, rock climbing, cooperative group living, white water rafting, canyoneering, and caving. These challenges produce stress and anxiety which, in turn, demand initiative and group cooperation. Supporters of Outward Bound assume that by overcoming these problems, an individual surpasses self-imposed physical, emotional and social limitations.

> The essence of wilderness therapy has been described as: challenge, the overcoming of a seemingly impossible task, the confrontation of fear, a success experience. It is an opportunity to gain self reliance, to prove one's worth. . . . The results are immediate. The task is clear, definable, unavoidable. It is an act of interpersonal interaction as well (Nold and Wilpers, 1974).

Wilderness-adventure instructors seek to provide an experiential basis for remodeling the behavior of delinquent youth. The focus is on the factors thought important to the origin or the prevention of delinquent behavior. Thus the important objectives include the elevation of self-concept, reduction in social alienation, increased problem-solving skills, and an enhanced sense of personal control over one's own behavior and destiny.

Wilderness programs have received professional recognition as an important noninstitutional program for juvenile offenders. For example, in 1978, the Vera Institute of Justice in New York City prepared a report for the Ford Foundation entitled Violent Delinquents. The Vera study cited Outward Bound type programs as one of three exemplary models for the rehabilitation of violent delinquents (Strasburg, 1978). The National Council on Crime and Delinquency supports alternatives which impose as little as possible in the lives of youth. In a recent forum, the Council cited wilderness programs as the least restrictive and optimum form of residential placement since wilderness programs offer a short term placement which prepares the individual for independent living and return to the community.

The intent of this report is to describe the current state-of-the-art with respect to wilderness-adventure programming for juvenile offenders. The paper is intentionally restricted in scope. While there is

an obvious relationship between wilderness-adventure programs and organized camping in general and therapeutic camps in particular, the adapted "outward-bound" model is a unique phenomenon within these larger movements. This paper is an attempt to provide a comprehensive framework for understanding the wilderness-adventure approach. It is intended for individuals interested in noninstitutional programs for juvenile offenders and would-be practitioners. What follows is meant to serve as a guide to the considerable working knowledge of an ever expanding alternative within the juvenile justice system.

Historical Overview

The first Outward Bound School grew from the exigencies of World War II and the educational theories of German-born Kurt Hahn. Expelled from Germany by Hitler in 1938, Hahn established residence in England. In 1941, he was commissioned by Lawrence Holt, head of a British shipping line, to design a program to train young merchant seamen to survive the hazards of naval warfare. It had appeared to Holt that large numbers of British seamen gave up their lives with little struggle when forced to abandon ship in the icy waters of the North Atlantic. Frequently, young seamen died, while older, more life-experienced sailors, although in poorer shape, would survive the same ordeal. The young men, it was theorized, suffered from the malaise and soft living inherent in urbanized life.

The first Outward Bound School, established in Aberdovey, Wales in 1941, put young men through a series of testing experiences designed to establish confidence and a more positive self-image. Hahn's educational philosophy of developing a student's inner resources through physical as

well as mental challenge spread after the war, and today, 34 schools in seventeen countries follow the concept of "outward bound"--the term seamen used when their great sailing ships left the safety of the harbor for the open sea and the hazards and adventures of the unknown.

The first Outward Bound School in the United States was established in 1962 in Colorado. It took a hundred boys into the mountains with the idea "to use the mountains as a classroom to produce better people, to build character, to instill that intensity of individual and collective aspiration on which the entire society depends for its survival" (James, 1980). Competence in the mountains was always a means to an end, never an end in itself.

From its inception, the Colorado Outward Bound School made inclusion of delinquent youth a high priority. The school's first director, Bill Chapman, arranged for regular referrals from the Denver Juvenile Courts. When new Outward Bound Schools opened in Minnesota and Maine in 1965, both schools continued awarding scholarships to adjudicated youth. Two early research efforts proved historical landmarks in the further development of such programs. In 1965, the Massachusetts Division of Youth Services began sending delinquent youth to the various Outward Bound Schools. In 1966, Professors Francis Kelly and Daniel Baer undertook a research-based evaluation of the Massachusetts program. Their study involved 120 adolescent boys, sixty assigned to one of three Outward Bound Schools and a matched group of sixty sent to traditional training schools. A one year follow-up study (Kelly and Baer, 1971) indicated that only 20% of the wilderness-adventure group had recidivated, while 42% of the boys in traditional institutions had done so.

The report also suggested the superiority of those Outward Bound Schools which depend on an exciting physical environment and a concomitant amount of physical and psychological stress.

In 1969, the Massachusetts Division of Youth Services established its own program, Homeward Bound, a six-week modification of the Outward Bound experience. Adjudicated youth were assigned either to Homeward Bound or to Lyman School, the state training school, on a "space available" basis. Although procedures of random assignment and matching for significant variables were not followed, the reported results were impressive. A fourteen month follow-up study demonstrated that 20.8% of the Homward Bound graduates recidivated as opposed to 42.7% of the individuals in the comparison group who served 6 to 9 months at the training school (William and Chun, 1973). These figures duplicated the results reported by Kelly and Baer.[1]

Given impetus by such findings, by the romantic appeal of the programs, and by the Juvenile Justice and Delinquency Prevention Act of 1974, the number of adventure-based programs serving delinquent populations multiplied rapidly in the 1970's. Although they occasionally turned for consultation and advice to the national Outward Bound Schools, the organizational relationship was informal. To a remarkable degree, however, adventure-based programs tend to be staffed with former Outward Bound instructors and students. Most of the some 80 present programs have only slightly modified the standard 23 day Outward Bound course format. The principal differences in programming for juvenile offenders

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[1]The Willman and Chun study did not, however, include a matched comparison group.

are in the special emphases on screening and intake, individual counseling, and post-wilderness course follow-up. For all programs, the greatest challenge is to successfully transfer the lessons of the wilderness experience back to the youth's everyday life in the community.

Some wilderness-adventure programs are organizational entities within sponsoring host agencies, for example, a State Department of Corrections. Others are non-profit corporations with Board of Directors, contracting services to agencies. Several programs operate through combinations of private donations, private foundation support and volunteers.[1] The issue of for-profit programs has caused some controvery in the field. Such ventures are strongly defended by some knowledgeable people, and denounced by others.[2]

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[1]The Foundation Center's Comsearch Printouts is a compilation of over 15,000 grants made in 1978 to non-profit organizations, arranged by subject areas such as "Youth Programs" and "Crime and Delinquency." Included are the names of the foundations, award amounts, grant recipients and types of projects funded. Each subject category is $3 (microfiche) from the center, 888 Seventh Avenue, New York, New York 10019.

[2]Following are some examples of programs with various agency connections and funding sources:

1) DISCOVERY ONE--a non-profit organization sponsored by the Archdiocese of Philadelphia and funded through the Public Health Trust of Philadelphia.
2) YOUTH DYNAMICS, INC.--a substance abuse and juvenile delinquency prevention program funded by the Missouri Department of Mental Health.
3) WILDERNESS CHALLENGE--a wilderness-adventure program serving predelinquent youth, sponsored by the Boys' Club of Hollywood.
4) EXPEDITION OUTREACH, INC.--a program in Idaho Falls, Idaho, which acquires some funding through court restitution. Court restitution requires individuals to pay back any expense incurred by the court or the victim of a crime. Restitution is paid before the offender is released from probation. Some judges in Idaho will include the cost of participation in Expedition Outreach as part of an individual's restitution plan.
5) VISION QUEST--a for-profit program operated in Tucson, Arizona, under private auspices.

Conceptual Framework

The goals of adventure-wilderness programs for juvenile offenders have generally included assisting youths in the development of problem-solving skills, enhancing self-concept and self-control, and reducing recidivism. Proponents of these programs believe that the emphasis on action, the use of the outdoors, the formation of a cooperative community, programmed success, an emphasis on stress, and the special role of the counselor make wilderness programs particularly well-suited for juvenile offenders who do not require institutional care.

Emphasis on Action--The use of adventure activities as a therapeutic vehicle stands in sharp contrast to the vicarious nature of traditional counseling in clinical settings. Most traditional therapies are primarily introspective and analytical. These "talking therapies" presuppose a verbal ability that is often absent in the offender population. Wilderness programs assume that experience is more therapeutic than analysis. Whereas most psychologists use counseling to change attitudes in order to modify behavior, wilderness adventure therapy assumes that attitudinal change can best follow behavioral change.

Cohen (1970) describes the "malicious" and "nonutilitarian" aspects of delinquency and the degree to which material gain often seems secondary to the fun, novelty and risk of delinquent behavior. Wilderness-adventure programs capitalize on the delinquent's need for action and adventure. The activities allow the acting out youth to channel his bravado in socially acceptable ways. At the same time, the withdrawn and cynical introvert may be drawn from his isolation.

The Use of the Outdoors--The wilderness serves as a novel situation for most problem youth. The individual is jolted from the false securities of his familiar environment and placed in a new, unfamiliar one. The outdoor environment facilitates an atmosphere conducive to new behavioral responses in youth who characteristically have great therapeutic resistance. Placement in an unfamiliar setting allows the individual to gain new perspectives on old patterns and assumptions. Further, the activities can be enticing and fun. Thus the delinquent enters a situation where he is open to new problem solving and coping techniques. The situation is quite different than that of the conventional correctional institution, where the usual adult roles are those of authorities and reinforcers of behavior and youths must conform to a rigid set of rules. In such a traditional setting the youth becomes programmed to function completely around rules designed by someone else. He seldom exercises his own cognitive skills in meaningful situations. By contrast, in the wilderness the rules are natural rather than arbitrary. The outdoor environment dictates that an individual respond flexibly and adaptively. The lessons of the environment emphasize responsibility rather than conformity: if one neglects to put up a tarp, one is miserable when it rains. Isolation and simplicity help to bring youth back to basics and into a manageable world. At the same time, the physical demands of adventure activities allow outlets for the reduction of tension.

Finally, the outdoors provides a superb laboratory for creative learning experiences without the formality of a school. The youth who might be bored or overwhelmed by a didactic lecture is energized by

learning in a wilderness setting.

Cooperative Community--At the very core of wilderness-adventure therapy is the fact that it is a group experience. The challenges demand a cooperative framework in which effective group dynamics are necessary to survival. While the delinquent may never have felt important to other human beings, he learns that in the context of a wilderness experience his group depends upon him. In the context of wilderness living, the small group thus offers the opportunity for the evolution of a genuine community. Immediate and concrete problems demand cooperation and the utilization of each individual strengths (Walsh and Golins, 1976). A system of exchange evolves. One boy might be a good route finder, another an excellent cook, while a third demonstrates interpersonal leadership under adverse conditions. All of these skills have survival value. Although the daily objectives might include the summit of a mountain peak, exploration of a narrow cave or negotiating a series of difficult white water rapids, the superordinate goal is survival.[1]

The cohesiveness of the group results in an atmosphere conducive to honest emotional expression and sharing. Although conflict is inevitable, the team feeling provides a context for its resolution. Youth learn that emotions--anger, frustration, fear, anxiety--are universal feelings but at the same time they learn socially acceptable ways of

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[1]William James in a essay in 1910, "The Moral Equivalent of War," observed that the exigencies of war instilled men with a unique sense of interdependence. At the same time the challenge of war cemented deep friendships, spawned order and discipline, promoted physical fitness, and provided a common cause. James was intrigued by the challenge of discovering a peacetime "moral equivalent of war." This essay by James deeply impressed Kurt Hahn, Outward Bound's founder.

releasing or expressing them. There is a great deal of peer pressure from the group to get along because it is in the group's self-interest and it is uncomfortable not to do so.

Every night the group discusses the day's successes and failures. Problems are resolved so that the next day will go more smoothly. As the group acquires knowledge, more and more of the decision-making is turned over to it by the staff. This is a new experience for problem youths for whom control and decision-making have in the past been functions of adult authority. The formulation of strong community feeling may also be enhanced by a variety of counselling methods--group discussion, role playing, value clarification, Gestalt techniques, and psychodrama.

Programmed Unavoidable Success--Adventure programs are carefully constructed, multi-faceted experiences designed to counteract patterns of failure. The problems and their resulting difficulties are introduced incrementally, so that they create tension without being overwhelming. Success is built upon success. One day's instruction is concerned with how to stuff a back pack and how to walk efficiently, while advanced course work may be of a technical nature, taking up such topics as how to belay a rock climb or how to travel on snow and ice with an ice ax. A sensitive instructor carefully reads the psychological and physical readiness of each student for the next step so that students are challenged but not overwhelmed.

Youth habituated to a lifetime of failure often reject success--it is not congruent with their self-images (Marecek and Mattee, 1972; Porter, 1975). The novelty of wilderness problems and the clear-cut

challenges they present seem to circumvent this syndrome. Problems are concrete, with a definitive beginning and ending. Once a rapid is reached in a six-man raft there is no mistaking success and failure. In a few brief seconds the raft pops out and the rapid is left behind forever. Success is tangible and unavoidably recognizable.

Stress--It is the intentional use of stress that marks the point of departure between therapeutic camping and wilderness-adventure programs. In the latter, stress is central to the change process. Stress--danger de morte--literally fear of imminent physical risk, serves as a catalyst for individual change (Cave, 1979).

Stress must not be so severe that it is debilitating. Of course, there is some objective danger in simply being in the mountains, the ocean, or a cave, but the dangers are generally less than those of modern urban life, particularly life in turbulent inner city areas. However, slight though the real danger may be, it tends to be exaggerated by the novice. The instructors have a refined understanding of the objective dangers. They are actually slim, but the youth perceives them as great. It is those perceptions that are pregnant with growth potential and that are sought by wilderness programs (Leroy, 1977). Thus students are placed in situations in which they must confront themselves and their abilities. Actions are demanded which challenge their self-definitions and encourage them to explore and surpass what they thought were their limits. Such use of stress brings about intense and powerful emotional responses, such as awe, fear and exultant triumph. It is out of such depth of feeling that growth emerges. Successful mastery in the face of potential serious danger can lead to a change in an individual's

estimation of himself. This reestimation can be away from exaggerated and unrealistic bravado and toward greater ego strength and confidence.

> This is not a simple up or down, but in the direction of a realistic and positive view of self. Offenders are able to integrate faults with strengths, problems with assets rather than see one or the other (Cave, 1979).

Stressful situations also provide opportunities for the individual to help and to be helped. The sense of mutual dependence and trust is therapeutic for many participants. Placed in danger, they not only work together but they depend on each other for spiritual and emotional support. Several studies indicate that the greater the stress the greater the social bonding in a group (Cave, 1979; Davis, 1972).

In the final analysis, it is hoped that adventure and the purposeful use of stress may snap the delinquent from defeating patterns and replace anomie, cynicism and alienation with wonder, perseverance, confidence and a sense of belonging.

The Instructor/Counselor--Self-confrontation does not automatically engender personal growth. Such growth results from reflection upon experience. Self-confrontation through adventure activities requires a highly skilled and sensitive instructor. The staff person must know when the group is ready for stress and how much stress it can withstand. In addition, the reactions of each individual must be ancitipated. There is only a small difference between tension that is creative and growth-oriented and tension that is defeating.

Staff also have the critical responsibility for helping youth see the implications of wilderness activities for their usual activities and problems. The adult staff person is an authority based upon his

demonstrated competence, knowledge and experience rather than an arbitrary custodian. Thus, the task of the wilderness instructor is immense: twenty-four hour, around-the-clock supervision of juvenile offenders; utilization of high risk activities which require technical expertise and judgment; and constant interaction as a counselor and educator.

The inordinate demands of the job and its resulting lifestyle tend to attract individuals quite different than those drawn to employment in correctional institutions. Such institutions tend to draw personalities high in authoritarianism, high in rule orientation, low in flexibility, and low in creativity (Harvey, 1971). Such staff must work with offenders who are frequently high in anomie, alienation and anti-authoritarianism. This mix is particularly unfortuitous. By contrast, the typical wilderness instructor tends to present a personality profile conducive to a positive relationship between adult and youth. The job tends to attract individuals who are unconventional, independent without being negative, high in task orientation, flexible in thought and action, creative and tender-minded (Kimball, 1979; Harvey, 1971; Hendy, 1975). Such qualities make for both good mountaineering judgment and for an effective role model for anti-authoritarian youth.

The Program Components

It is convenient to divide wilderness-adventure programs into three phases: 1) agency orientation and referral of students, 2) the wilderness-adventure expedition, and 3) the individual evaluation report and comprehensive community-based follow-up.

There is no rigid wilderness-adventure program model. Each program is shaped by its individual goals and relationship to the correctional system and youth serving agencies. Youth are currently referred from many points of the juvenile justice system. Some programs emphasize delinquency prevention by working closely with local high schools and school guidance counselors. Some placements are made at the time of encounter with the police. Other offenders are referred at the initiative of the juvenile courts, often as an alternative to long term incarceration. Wilderness programs can be utilized to complement existing youth services, such as residential treatment centers and group homes. In some instances, they receive referrals from state correctional facilities, which utilize the stress/challenge experience as a means of reintegration into the community. Although the programs receive referrals from a variety of sources including schools, drug abuse programs, judges, probation officers, the police, group homes, and training schools, adolescents from heterogeneous agencies are not necessarily grouped together. For instance, juveniles referred by a correctional institution are unlikely to be placed with those referred by school counselors.

Referral agents should have a thorough understanding of what wilderness-adventure programs are about. Many program directors believe that this insight is best gained experientially and thus offer periodic short term "communication-courses." These might utilize river running, rock-climbing, cross country skiing, or backpacking as means to create shared reference points between agency staff and the students whom they will refer. It helps when a judge or probation officer can say to a

youth, "I've participated in this program and I think it will help you. It is hard but you will learn a great deal about yourself."

It is, of course, impossible to predict with surety an individual's success or failure in a wilderness-adventure program. Thus the intake decision must be a subjective one made by the referring agency, the youth and the wilderness staff. Decision-making should not be obscured by the common myths. Thus:

1) Students need not to have prior wilderness experience. In fact, the novelty of the wilderness is considered a critical element in producing behavioral change.

2) Students do not have to be athletically inclined, macho, agile, or inordinately brave.

3) Girls can participate as well as boys. The issue of co-ed groups, however, is a controversial one. Most programs offer all boy or all girl groupings.

4) The type of offense does not appear to be important in terms of selection. Status offenders, violent and non-violent youths, and even young adults can benefit.

Programs seem to be far more clear about who cannot participate as opposed to who can. Individuals who are commonly excluded from wilderness-adventure programs are juveniles with a history of repeated physical violence, those who are deemed psychotic or severely emotionally disturbed, those under heavy medication, or those youth who are potentially suicidal. However, some programs are willing even to serve some youth in those categories.

During the referral process, most programs require that each individual complete both a physical and psychological exam. Programs which do not have their own clinical resources utilize other diagnostic centers. If a student has a court file or previous diagnostic reports, that information is usually forwarded to the wilderness program before

a student is accepted for placement.

The youth who comes to the wilderness experience with misconceptions or inadequate understanding will often fail. It is imperative that he or she have a realistic picture of the demands and expectations of the program. This understanding is often facilitated by a wilderness staff member presenting a slide show which depicts all the activities of the course. This presentation is followed by an individual interview to determine the degree of the youth's motivation. The decision to participate should be made in light of the knowledge that: 1) the program is rugged; 2) participants will be asked to do things that they might be frightened of or resistant to do; 3) the expedition is a group experience, not an individual one; 4) the program once begun, should be completed in all its phases. Many programs prepare written contracts reconfirming these points and also clarifying a few basic rules pertaining to drugs, alcohol and substance abuse. Wilderness program counselors should explore with each youth the psychological and behavioral issues which they will work on during the adventure experience. Whenever possible the parents or legal guardian of the adolescent should be included during the referral and orientation phase.

Wilderness-adventure expeditions range from 14 to 30 days. The course is usually mobile and operates without the necessity of a base-camp. A 1:3 staff-to-youth ratio is maintained in small groups of 8 to 10 juveniles. The initial problems involve basic survival needs such as cooking, shelter building, map reading and physical comfort. At this point in the expedition, the youth is essentially dependent on staff.

As the participants develop these skills, they are presented with increasingly more difficult tasks. Usual activities include physical conditioning, basic skills instruction leading to a technical challenge, solo (a period alone in the wilderness), a community service project such as bridge maintenance or clean-up projects, a final expedition with minimal staff intervention, a marathon run, and a graduation ceremony.

Immediately upon course completion, wilderness staff members write a comprehensive evaluation for each participant and send this information to the agency which made the referral. Although wilderness-adventure programs emphasize the therapeutic aspects of the adventure experience, they also afford a valuable diagnostic tool. They can function in a manner somewhat akin to a projective test. Because the problems--for example, route finding, planning menus, rock climbing--are often high in ambiguity, set behavioral responses are impossible. The ability of each individual to deal flexibly and adaptively with physical and social challenges can be readily assessed.

The evaluative report is the link between the program, the youth, and the referral source. It should include an introduction, a summary of the individual's progress, comments on socialization skills, general observations and, finally, recommendations. If the referral agency has identified target behaviors or specific goals, the report should assess how successfully these areas were addressed. The recommendation section should attempt to outline a desirable program follow-up for each youth. Typical recommendations deal with home placement advice, family counseling suggestions, drug abuse counseling, and academic or vocational counseling.

There is, as previously noted, great variety among wilderness programs in the degree of follow-up to the adventure experience. Fairly typically, however, follow-up is a shared responsibility between the youth, the wilderness program staff, the referral agency and, when possible, the youth's parents. Often, three and six month contracts are made between these various constituencies and monitored by the referral agency or probation officer. Many programs maintain context with participants through such activities as additional short wilderness courses, parent/graduate nights, family visits, newsletters, reunions, community service projects, Outward Bound scholarships, maintenance of a telephone crisis hot line, and leadership positions on the wilderness staff for outstanding graduates.

Wilderness staff also often act as advocates for program graduates before their families, schools or the courts. This may include requesting the schools or juvenile court to provide specific follow-up services to a youth (such as vocational training or remedial education), or spending time with the youth and his family following the completion of the program in order to reflect on the experience and the family's future together.

Research and Evaluation

Outward Bound Schools and similar programs have been the subject of considerable research and evaluation. For the reader who desires to review the literature pertaining to the broad collection of research in the field, several compendiums are available (Godfrey, 1974; Pollack, 1976; Shore, 1977; and Wichmann, 1979). Arnold Shore of the Russell

Sage Foundation reviewed some fifty studies in depth and appended a bibliography listing 1,500 sources related either directly or indirectly to Outward Bound. Despite the volume of research, Shore concluded that the results of these studies must be considered cautiously because of a variety of methodological deficiencies.

There are several reasons for the lack of definitive research findings. First, the programs are relatively new, and are still developing. The first full-fledged program, Homeward Bound in Massachusetts, began only ten years ago. Second, wilderness program staff have often resisted program evaluation and social science research. Counselors and therapists often prefer to rely on their intuitions and feelings as measures of program effectiveness. Third, variations in the characteristics of particular programs makes it difficult to standardize or replicate for comparative purposes. Independent variables which fluctuate without a great deal of control include the particular instructor of a course, the environment and weather, the degree of risk encountered, the amount of stress in the program, the composition of any particular group, and so on. Further, a classical experimental design where subjects are randomly assigned to a wilderness program (experimental group) or to an alternative strategy (control group) is rarely conducted. Research is sometimes conducted in a quasi-experimental fashion with groups <u>assumed</u> to be similar, without the assurance provided by random assignment. Sometimes groups are matched for such characteristics as age, sex, race, type of offense, number of prior commitments, IQ, and other characteristics, but many studies have had neither comparison nor control groups. Lacking such experimental or quasi-

experimental controls, it is difficult to know whether observed changes have resulted from the treatment intervention or from other external, non-experimental factors such as maturation or exposure to other treatment programs.

Research on the effectiveness of wilderness programs for juvenile offenders has generally focused on the effects of the experience on youths' personality attributes (for example, aggressiveness, self-concept, maturity) and rates of recidivism. In addition, limited research has been conducted on the characteristics of youths which seem to be associated with recidivism, and on the costs of wilderness programs. Although the findings are not definitive, they do provide the only available data. Conclusions based on these findings should be made cautiously, recognizing the limitations of the studies on which they are based.

Personality Attributes

Kelly and Baer (1971) conducted a study involving 120 adjudicated delinquent boys from Massachusetts who were sent to one of three Outward Bound Schools. This group was compared with a matched group of youths who were sent to correctional institutions. The results showed significant positive changes on six scales of the Jesness Inventory (autism, alienation, socialization, manifest aggression, social maladjustment, and value orientation) for Outward Bound graduates. Significant positive changes also occurred on three Semantic Differential Scales, suggesting that the wilderness experience increased the level of aspiration and maturity, reduced feelings of bravado and increased their identification with socially acceptable behavior.

Collingwood (n.d.), in a report prepared for the Arkansas Rehabilitation Service, assessed the effectiveness of a wilderness adventure program for twenty-one first offenders. His results showed significant improvement of self-concept on the Jesness Inventory for program participants, and significantly increased internal locus of control on the Rotter I-E. It is now known definitively whether these changes were a result of the program or due to other factors, however, because of the absence of a comparison group.

Cave (1979) conducted an experiment which examined the effects of a wilderness-adventure program on young adult offenders. The study included two experimental groups and a comparison group of individuals who remained incarcerated. The two experimental groups attended an adventure program, one group participating in a low stress course, and the other in a high stress course. Cave found that in relation to the comparisor group the experimental groups showed substantial improvement in the maladaptive behaviors produced by feelings of mistrust, shame, doubt, guilt, inferiority and role confusion as measured by changes on the Minnesota Multiphasic Personality Inventory. In addition the high stress experience was found to be a significant independent variable in producing these changes.

Not all research efforts suggest that wilderness-adventure programs are effective. For instance, Partington (1977) investigated the effects of such an experience on "high delinquency risk youth." The study utilized a classical experimental design with 37 subjects randomly assigned to both the experimental group and the control group. The author measured self-concept changes on Ziller's (1973) Self-Other

Orientation Tasks. Behavioral changes were investigated with a Behavior Rating Schedule developed especially for this study. The author found no significant differences in either psychological or behavioral adjustment between the experimental and the control group. Similar non-significant program effects were obtained in another stress/challenge study, Project SARE (Birkenmayer and Polonoski, 1976).

Recidivism

Kelly and Baer (1971), in their study of 120 adjudicated delinquent boys and matched comparison group, defined recidivism as a return to a correctional institution for a new offense. Their data indicate that nine months after wilderness course completion, the recidivism rate of program participants was 20 percent, compared to a rate of 34 percent for an institutionalized comparison group. A one year follow-up study showed a rate of 20 percent for program participants and 42 percent for the comparison group. Willman and Chun (1973) found a recidivism rate of 20.8 percent for the graduates of Homeward Bound, and 42.7 percent for an unmatched group of youths who served 6 to 9 months at a training school. They also found that 38 percent of the Homeward Bound recidivists committed offenses within six months following the program, compared to 72 percent of the training school recidivists.

Cytrynbaum and Ken (1975) conducted a study of 49 juvenile offenders, who participated in the Connecticut Wilderness School Program and 54 youths in a comparison group of youths provided with traditional services (for example, counseling, placement in a group home) by the

Council on Human Services of the State of Connecticut. In the six months following the adventure program, the wilderness group showed a greater decrease in arrests and legal difficulties, drug and alcohol abuse, and dependency on social service agencies. The greatest difference appeared in the recidivism data, which indicated that 11.1 percent of the Wilderness School graduates, versus 30.2 percent of the comparison group were arrested during the same period. Hileman's (1979) seven month study showed a recidivism rate of 22.9 percent for 48 delinquents participating in the Underway Program at Southern Illinois University compared to 39.6 percent for a matched group of 48 delinquents provided with advocacy, counseling, alternative education, and placements in group homes.

Hileman also compared the seriousness of the petitions filed against the recidivists. Seriousness was defined by the 1977 Illinois Statutes of Criminal Law and Procedure which idenfities 8 classifications of crime. This system includes a continuum with the least serious offense, "Class C Misdeameanor," given a value of one and the most serious, "Murder," given a value of eight. The crimes committed by the Underway graduates were all misdemeanors and were significantly less serious ($p < .02$, Mann-Whitney U-test) than those committed by the comparison group.

Long term recidivism studies (Kelly, 1974) suggest that the differential effects of a wilderness-adventure experience may dissipate after the period of a year. This indicates a need for strong, follow-up experiences to reintegrate the youth back into the community. A wilderness-adventure program can be connected to restitution programs, vocational counseling, job placement, educational opportunities, and

family counseling. It should be noted, however, that the issue of follow-up is controversial among wilderness program proponents.

> Practitioners may have gone overboard on follow-up. The issue of follow-up has become a sacred cow. . . . Some of the more zealous adherents even go so far as to deny the efficacy of utilizing adventure education at all for troubled youth unless it is coupled with a panoply of supportive aftercare services. . . . What I have decided is that the need for follow-up is relative to the individual's needs. . . . Follow-up can be useful but not necessarily so. . . . Over-responding to a kid's troubles can be just as harmful as under-responding. It can breed a feeling of needing help (Golins, 1979).

Although there have been few research attempts to link outcomes with specific program components, a few aspects of the program appear to be critical. The preparation of the student for the demands and rigors of the wilderness program seems to be very important. A high stress experience may be a significant independent variable in producing changes in personality attributes (Cave, 1979). The Kelly and Baer study (1971) suggests the importance of stress. Cave's study also indicates that high stress courses may result in greater social bonding. Researchers should systematically manipulate independent variables such as the length of the course, the experience of the instructor, the mix of activities, physiological stress, and psychological stress, and attempt to assess their effects on changes in various dependent or outcome variables.

Selecting Participants

The Kelly and Baer Study (1971) indicates variables outside the program may significantly relate to recidivism. Youths who were older at the time of first court appearance and at time of first commitment,

and who came from homes where both parents were present tended to have lower recidivism rates than younger youths and those from homes without both parents.

The effect of other variables on program success, such as age, sex, race, arrest records, legal status, and family background, of youth in wilderness programs has not been studied extensively. It is not clear whether these are important differences in the characteristics of those who become recidivists and those who do not. A challenging topic for future research would be the reliable prediction of who is likely to benefit from wilderness programs.

There is evidence that the creation of alternatives such as wilderness programs can result in the referral of youths who would not otherwise have been formally processed (Reamer and Shireman, 1980). This phenomenon is often called "widening the net," and results not in diverting youth from the system but in ensnaring greater numbers overall. Would delinquents with high motivation do as well in other programs? Would these delinquents do as well without any intervention?

Cost Savings

As an alternative to incarceration, wilderness-adventure programs seem to offer significant cost savings. Diversionary and early release programs can decrease the amount of time public funds support delinquents. The Michigan Department of Social Services found, for instance, that even in the absence of reduced recidivism rates, a Michigan based wilderness-adventure program saved the state $230,580 (Dunn and Max, 1978). Cost savings were calculated by (a) figuring what placements would have cost

if a youth had not been diverted, (b) totaling what it did cost to attend the Michigan program, and (c) determining post-placement cost for the period between program completion and the "average length of stay" of the placement diverted from (based on the average length of stay of the matched sample). Adventure programming apparently does at least as well as institutional placement for appreciably less expense (Golins, 1979).

The availability of space is often the single most important determinant of the number of individuals placed in institutions. Judges, prosecutors, police, and parole boards tend to adjust their commitment rates to such availability (Nagel, 1980). Wilderness-adventure programs do not involve building more institutions, and this alone results in significant savings. It is important to note, however, that any increase in number of participants may offset the savings to some extent, even though the cost per youth is less.

Current Issues

This section addresses four problems which are current issues in the development of wilderness-adventure programs. The issues are: 1) standards and regulations; 2) the management of risk; 3) selection of staff; and 4) the environmental impact of the programs.

1) Standards and Regulations--The rapid proliferation of adventure-wilderness programs has diverted many young people from formal juvenile justice system processing. The stress/challenge concept is increasingly accepted by professionals and the public. Some individuals, however, have begun programs with unfortunate naivete. Carelessly developed programs can be very poor imitations, and may even be dangerous. Program

proponents are concerned that poor quality programs reflect negatively on their own programs. Some are also concerned about programs which utilize wilderness experiences, but also use more controversial approaches, such as physical intimidation, verbal abuse, physical restraint, and starvation hikes.

Wilderness-adventure programs haveno established standards, unlike programs monitored by such organizations as the American Camping Association. Some practitioners feel that all wilderness programs and instructors should be certified. Others feel that poor programs will attract neither funding nor referrals and will fade with minimal contamination of other programs.

The Association for Experiential Education (AEE) is a professional organization considering this problem. The AEE lists over 80 adventure-based wilderness programs in its Division of Adventure Alternatives in Corrections, Mental Health and Special Education. At the 1979 AEE Annual Conference in Portsmouth, New Hampshire, the task force investigating standards and guidelines made the following recommendations:

1) At the present time, the AEE membership is opposed to the concept of required, outdoor leadership certification for wilderness staff.

2) The AEE, in consultation with other organizations such as the American Camping Association should establish guidelines for wilderness-adventure programs.

3) Once guidelines are established, the AEE membership favors the concept of peer review of wilderness-adventure programs. Programs in compliance would be deemed "in good standing" with the professional organization.

There is not yet any state licensing or regulation of wilderness programs similar to the guidelines for day care programs, nursery schools,

group homes, and foster homes. The Association for Experiential Education membership believes that failure to develop standards will surely result in these standards being imposed by external authorities.

2) The management of risk--Although there is not a great deal of objective risk in wilderness-adventure programs, since 1964 there have been fifteen deaths within the seven National Outward Bound Schools and at least six more in programs adapted from this model. The possibility of danger in adventure endeavors must be recognized. However, it should also be realized that since the first Outward Bound school was initiated in the United States there have been 71,000 participants. Considering this level of participation, the overall safety record is impressive. The fatality rate of adventure programs has been calculated to be .5 per million student hours of exposure (Meyer, 1979). This compares to an accidental death rate in the United States of .1 per million human hours, considering all causes. Thus, one could say adventure activity is five time as likely as normal activity to result in a fatality. As a point of reference, however, the fatality rate per million hours is .7 for automobile driving and even worse for playing football.

Outward Bound, Inc. is currently in the midst of a $2.5 million law suit due to several recent deaths. Regardless of the judicial outcome, Outward Bound officials have decided to add a risk disclosure form to their application process. This form will point out that the wilderness environment is inherently dangerous and that participation involves some objective risk.

The risk in adventure programming for juvenile offenders is a more complicated issue. Unlike the potential Outward Bound student who reads

a marketing brochure and elects to enter the program and the wilderness environment with its undeniable, objective hazards, the juvenile delinquent is channeled by a social service agency, by a judge's decision, or as an alternative to incarceration. Even when the delinquent enters a program on a voluntary and well-informed basis, the legal predicament often entails a form of subtle coercion. One youth said, "Some choice, jail or three weeks living in the desert sand."

Every adventure-based program should have a written safety policy which outlines safety procedures for each anticipated adventure activity. These guidelines should serve as models, not as cookbooks. The safety policy should be tailored to the particular program, activities, and clientele. No safety policy can possibly consider the innumerable circumstances which can arise during the course of a program. If the policy is too prescriptive, it might actually interfere with the judgment of an experienced instructor.

A policy should distinguish between desirable procedure and absolute rules. For instance, one wilderness program recently revised its white water river policy which stated that all participants will swim a rapid at the beginning of every raft trip. The intent is good--individuals should get the feel of the water in case they get tossed from a boat. The revised safety policy, however, states that if the river conditions warrant and the weather allows, individuals should practice swimming through a rapid. The rule was dropped in favor of a guideline. However, some more rigid rules remain necessary, for example, "students will wear helmets when rock-climbing" or "students will be

belayed when rappelling."[1]

3) Selection of staff--Staffing is the key to successful programming. Directors of wilderness-adventure programs differ in their opinions about the characteristics to look for when hiring instructors. One point of view is that it is possible to over-emphasize the formal training potential staff have received (for example, from a course offered by the National Outdoor Leadership school). Technical proficiency can be taught through staff training. Judgment, based on experience in wilderness-adventure activities, is considered a more important quality.

It is commonly believed that instructors should have some knowledge of group process and also be familiar with techniques, games and strategies to facilitate group experiences. These skills can also be acquired through staff training. Although academic degrees in counseling and academic course work can be an important indication of an individual's interest in counseling, they are by no means an assurance that someone will be an effective counselor in the wilderness. Many lay professionals can be effective counselors and group facilitators. In general, the most important qualities an instructor brings to the job are flexibility, a

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[1] It is a good idea to have an outside consultant from another agency review the program's safety policy statement. It is also useful to have outside personnel conduct periodic field checks to ensure that the policy is actually being implemented. Wilderness staff should also possess first-aid certification and first aid knowledge. The two are not always the same. It is not uncommon to find wilderness staff who are certified Emergency Medical Technicians but who remember very little about their emergency medical training. Staff training should address emergency care and evacuation procedures. Evacuation contingencies should be included in the safety policy. Finally, each program should keep a guide book for the areas in which it operates. Important items that should be included are reconnaissance reports of the area, evacuation routes, program and local area emergency telephone numbers, directions to the nearest hospital, and a list of local search and rescue teams.

high degree of perseverance and tolerance for frustration, an ability to empathize, and a sense of humor.

An enduring problem encountered by wilderness-adventure programs is that few have Black, Hispanic, Oriental, or Native American instructors and administrators. Many of the youths served by these programs are minority. Training programs for minorities should be a priority. In addition, efforts should be made to hire bilingual staff in multilingual areas.

4) Environmental impact--Wilderness programs rely on the existence of remote, pristine wilderness areas, free of roads. Instructors encourage the idea that each student's experience is unique. Well-trodden trails, camp grounds, and roads detract from the feeling of uniqueness and isolation. Although they follow the most careful and rigorous conservation strategies, groups leave their mark. Programs return to the same areas. Currently, for example, there are seven wilderness programs for offenders utilizing a narrow area of Big Bend National Park in Texas. The environmental impact is substantial.[1] Program directors hesitate to move on to new, undiscovered wilderness areas and spread out program environmental impact. Coordination between programs through systematic planning and scheduling might help alleviate overcrowding and overuse of wilderness areas.

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[1]This is true in spite of the fact that most programs have stringent environment guidelines. Some examples of rules: no toilet paper (use rocks or leaves); no campfires (cook on backpack stoves); touch nothing in caves; no cutting switchbacks off trails; wear tennis shoes on trails, not vibram soles; carry out or burn all trash and avoid using cans (which irresponsible students might bury); use portable toilets on river trips.

CONCLUSION

Wilderness-adventure programs present juvenile offenders with a series of progressively difficult physical challenges and problems. The assumption is that when faced with these tasks an individual will call upon reserves of strength and will-power which were previously untapped. There are times when success requires the help of companions and reliance upon the overall strengths represented within a group. The wilderness experiences provide opportunities to be successful, to help, and to be helped. Activities which appear to be high in danger compel a youth to face his own abilities and limitations, and to develop problem-solving skills. A major goal of wilderness-adventure programs is to provide experiences which will help youths develop skills upon which they can rely in the future.

While it would be a mistake to see wilderness-adventure programs as a panacea to the problems of juvenile delinquency, it would be an even graver error to dwell exclusively on their limitations. Wilderness programs are a useful approach toward developing independence and responsibility. Unlike correctional institutions, which segregate juveniles from their community and shelter them from adult responsibilities, wilderness programs offer interaction with responsible, sensitive adults and provide provocative challenges in a socially acceptable way.

As a short-term intervention strategy wilderness-adventure programs are a least restrictive alternative to long-term incarceration. Because they do afford relatively short-term intervention, they may be supplemented with other services. Based on an individual's needs, a

youth might be diverted from an institution to an adventure program, followed by participation in a restitution program, alcohol counselling, and, finally, vocational training. Each strategy by itself might have limited impact, but when combined the cumulative impact can be substantial. Thus, wilderness-adventure programs can be a valuable component in a combination of services.

Research efforts in the area of wilderness-adventure programs have been limited. Too often research designs have failed to control for alternative explanations to changes in personality attributes and recidivism rates. Research has also been plagued by the lack of precision instruments to identify and measure significant psychological change in an individual. Unfortunately, psychological tests such as self-concept scales are often low in statistical reliability and validity. There is some evidence, however, which at least suggests that wilderness programs can improve youths' self-concept and rates of recidivism.

Eighteen years after the first Outward Bound School began in the United States, and eleven years after the first adventure-based wilderness program for juvenile delinquents began at Homeward Bound in Massachusetts, the wilderness-adventure movement is entering a more mature stage of development. In order to further the state of the art among practitioners there must be a systematic attempt to gather information about the characteristics of wilderness-adventure programs, the youth who participate in them, and the effectiveness of the program. Efforts might focus on the establishment of a data base to centralize demographic data on all participants. Data might include information of

sex, age, legal status, family background, social history, arrest record, and so forth. Follow-up data and recidivism figures would be added. A second area of focus for the data base might be information relating to accidents and safety. Programs should share experience and critique problem areas. Third, program accreditation should be established through peer review of all wilderness adventure programs which work with juvenile offenders. This review process could offer a careful assessment of safety procedures and staff selection, and investigate questionable or controversial practices such as physical confrontation and starvation hikes. A deliberate attempt to gather as much information as possible about wilderness-adventure programs can greatly enhance the quality of this unique approach to handling juvenile offenders in a noninstitutional setting.

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APPENDIX A

Resource Directory

Associations:

The Association for Experiential Education (the AEE) provides varied and complementary forums to address contemporary issues in experiential, adventure-based education and encourages the exchange of ideas, information and resources. Specifically, the Association sponsors the following:

1) The conference on Experiential Education--an annual conference since 1973 that draws participants from all over the United States and Canada. The 1980 conference will be held in Santa Fe, New Mexico, October 25-27.

2) The Journal of Experiential Education--Professional journal published in the Fall and Spring, which is composed of the contributions of leading practitioners and theoreticians in the field.

3) A Jobs Clearing House--AEE members receive monthly mailings which announce job openings in the many fields related to experiential education.

4) The AEE has Divisional entities within the larger Association. The largest Division is Adventure Alternatives in Corrections, Mental Health and Special Education. Consequently, the Jobs Clearing House, the AEE Journal and the Annual Conference are heavily oriented to stress/challenge programming.

Address of the AEE: Box 4625
Denver, Colorado 80204
(303) 837-8633

The National Consortium on Camping and Outdoor Education for Youth-at-Risk was established by the Fund or Advancement of Camping. It is particularly interested in the establishment of outdoor alternatives for Youth-at-Risk. It specifically recognizes the stress/challenge concept as one viable approach. Among the goals of the Consortium are to provide leadership in the area of program development and research dissemination. It is currently a clearinghouse of interdisciplinary strategies.

Address of the FAC: Fund for Advancement of Camping
19 South LaSalle Street
Chicago, Illinois 60603
(312) 332-0827

Films:

The Connecticut Wilderness School

This 50 minute color documentary shows the orientation of students, their parents, and social service agencies to the demands of a 23 day wilderness course. The film depicts the wilderness experience and discusses how this ties into a year long follow-up program by the Connecticut Wilderness School staff. Available from the Connecticut Wilderness School, Box 2243, Goshen, Connecticut 06756.

A Journey to the Outer Limits. National Geographic Society.

The film documents the story of "Savage," a street gang leader from Chicago who attended a Colorado Outward Bound School course as an alternative to incarceration. The cinema verite style takes the viewer through the eyes of the various group participants as they discover new psychological limits.

Outward Bound: Schools of the Possible. Summit films.

This film is a collage of footage shot at the various Outward Bound Schools. At the time that the film was made the schools were not co-ed. Hence, the film is outdated to some degree. The footage of white water activities, rock climbing in Colorado, crevasse rescue in the Northwest, canoeing in Minnesota and sailing, provide an excellent feel for Outward Bound and the stress/challenge approach.

Wilderness Skills Training:

Both the Outward Bound Schools and the National Outdoor Leadership School offer courses for educators and professionals. Several of the Outward Bound Schools have Teacher's Practicums which specifically address issues related to Outward Bound Adaptive Programming. The National Outdoor Leadership School has an instructors' training course.

Addresses:

Outward Bound, Inc.
354 Field Point Rd.
Greenwich, Conn. 06830
(203) 661-0797

National Outdoor Leadership School
Post Office Box A.A.
Lander, Wyoming 82520
(307) 332-4381

The Outdoor Leadership Training Seminar Program offers courses of varying length which emphasize technical skill acquisition as well as group counseling skills.

Address: Outdoor Leadership Training Seminars
2220 Birch Street
Denver, Colorado 80207

Safety Policy and Instructor's Handbook:

The following programs will allow individuals/programs to purchase copies of instructors' handbooks and the program's safety policy:

Addresses: Santa Fe Mountain Center
615 Washington Avenue
Santa Fe, New Mexico 87501
(505) 983-6158

Colorado Outward Bound School
945 Pennsylvania
Denver, Colorado 80203
(303) 837-0880